





Harvard Medical Alumni Bulletin

Volume 20, Number 2

January, 1946

THIS BULLETIN MAY BE MAILED FIRST CLASS FOR 9 CENTS TO
MEN WHO ARE IN MILITARY SERVICE OUTSIDE THE COUNTRY

In severe leukopenia,



"Pentnucleotide . . .

The authors amplify this statement by specifying the improvements in the leukopenic blood picture which are usually produced by the administration* of Pentnucleotide:

may cause
remarkable
improvement"

- 1 "Bone marrow puncture reveals improvement even before the peripheral blood picture has altered."
- 2 "Immature granulocytes and monocytes begin to appear in the peripheral blood . . ."
- 3 "The total leukocyte count rises . . . [and] may continue to rise . . . values of 15,000 to 20,000 per cubic mm. are not unusual within a week or two . . ."

—Goadman, L., and Gilman, A.: *The Pharmacological Basis of Therapeutics*, N.Y., MacMillan, 1941, p. 1147.

PENTNUCLEOTIDE

*40 cc. daily, in divided dosage.

A Mixture of the Sodium Salts of Pentose Nucleotides for Intramuscular Use



Smith, Kline & French
Laboratories, Philadelphia, Pa.

SHOULD VITAMIN D BE GIVEN ONLY TO INFANTS?

VITAMIN D has been so successful in preventing rickets during infancy that there has been little emphasis on continuing its use after the second year.

But now a careful histologic study has been made which reveals a startlingly high incidence of rickets in children 2 to 14 years old. Follis, Jackson, Eliot, and Park* report that postmortem examination of 230 children of this age group showed the total prevalence of rickets to be 46.5%.

Rachitic changes were present as late as the fourteenth year, and the incidence was higher among children dying from acute disease than in those dying of chronic disease.

The authors conclude, "We doubt if slight degrees of rickets, such as we found in many of our children, interfere with health and development, but our studies as a whole afford reason to prolong administration of vitamin D to the age limit of our study, the fourteenth year, and especially indicate the necessity to suspect and to take the necessary measures to guard against rickets in sick children."

*R. H. Follis, D. Jackson, M. M. Eliot, and E. A. Park: Prevalence of rickets in children between two and fourteen years of age, Am. J. Dis. Child. 66:1-11, July 1943.

MEAD'S Oleum Percomorphum With Other Fish-Liver Oils and Viosterol is a potent source of vitamins A and D, which is well taken by older children because it can be given in small dosage or capsule form. This ease of administration favors continued year-round use, including periods of illness.

MEAD'S Oleum Percomorphum furnishes 60,000 vitamin A units and 8,500 vitamin D units per gram. Supplied in 10- and 50-cc. bottles. 83-mg. capsules now packed in bottles of 250. Ethically marketed.

MEAD JOHNSON & COMPANY, Evansville 21, Ind., U.S.A.



For pyloric stenosis in infants

In four published studies of pyloric stenosis in infants representing 162 cases, there were 135 effective results by medical treatment with Eumydrin.

In most instances Eumydrin was administered orally as a 1:10,000 solution (prepared by dissolving 1 tablet in 10 cc. of water). Initial dose: 1 cc., twenty minutes before each feeding, for two or three doses. Subsequent doses: from 3 to 6 cc.

E U M Y D R I N

TRADEMARK REG. U. S. PAT. OFF. & CANADA
Brand of Atropine Methyl Nitrate

Available as tablets of 1 mg.
in bottles of 25 and 100. Also
powder in vials of 1 Gm.
and ampuls of 100 mg.

W R I T E F O R D E T A I L E D I N F O R M A T I O N



W I N T H R O P C H E M I C A L C O M P A N Y , I N C .
Pharmaceuticals of merit for the physician

New York 13, N. Y.

Windsor, Ont.



Medical School Notes



NOW IT CAN BE TOLD

In recent issues of the *BULLETIN* the decorations and citations as well as military rank and duties of many of our faculty, alumni, and students have been described.

It is quite apparent that this large army of Harvard Medical School doctor-soldiers have performed an immense amount of work of very considerable value to the Armed Services, along with their colleagues from the other medical institutions in the land.

Those who stayed at home, however, were not wholly idle, and while their service did not involve the personal sacrifice, hazards, or geographical range of their uniformed classmates, they nevertheless covered a wide range of investigative pursuits in the name of the government, designed to abet the medical or tactical units of the Armed Services in the furtherance of their objectives.

The work of these many "veterans of the OSRD" is at present finding expression in the publication of their results, and for the next year or two we may expect that detailed accounts of a host of investigations, carried out under the Office of Scientific Research and Development in Washington, will appear in print. These contracts, between the Office of Scientific Research and Development and Harvard University, have usually been carried out on a "confidential" or a "restricted" basis and it has only been recently that publication or public discussion of much of this work has been acceptable to the authorities.

It would be folly to attempt in these columns to write down in detail all the work that has been done at the Medical School in this category of research. Indeed, a book covering in part these "home front" activities is projected. However, it

is possible to cover briefly the scope of the OSRD contracts pursued at the Medical School and thus give to our readers some idea of the investigative jobs performed in these precincts. The work mentioned below represents largely that carried out under contract between the OSRD and Harvard University. There were many problems investigated at the Medical School under other types of contract, very few of which are mentioned below. This is not, therefore, a complete catalogue of war research at Harvard Medical School.

PLASMA FRACTIONS AND BLOOD SUBSTITUTES

Of the 29 contracts granted to the University and involving Medical School personnel, 4 dealt with plasma fractionation and problems relative to the blood substitutes.

We are all familiar with the broad outline of Professor Edwin J. Cohn's monumental work in the fractionation of the plasma proteins. The work carried out in this department would in itself take much space to describe; indeed, a recent issue of the *Journal of Clinical Investigation* was given over entirely to an account of some of their methods and clinical results. Under this one contract many doctors and technical personnel have been at work both in the Department of Physical Chemistry and in the outlying clinical departments where testing of plasma fractions was undertaken. The development of concentrated albumin, fibrin foam, thrombin solution, fibrin film, antibody and typing globulins to a level of clinical application is now a familiar story.

Dr. F. H. L. Taylor, of the Thorndike Laboratory at the Boston City Hospital, has carried out research on the stability of certain labile plasma constituents with

special reference to the preservation of plasma, a topic also touched upon by Dr. Cutting B. Favour of the Department of Medicine at the Peter Bent Brigham Hospital who worked on the problem of preservatives for biological products, especially blood.

Dr. John G. Gibson also at the Peter Bent Brigham Hospital, collaborating with Professor Joseph C. Aub at the Massachusetts General Hospital and Professor Robley Evans at MIT, has carried out an extensive research also bearing on the problem of blood preservation. In their work the orientation has been directed towards the survival time of transfused radioactive red cells, using this as a tool to study the efficacy of various preservative agents. Partly as a result of this work, the "acid citrate dextrose" preservative fluid became widely accepted.

Dr. Louis K. Diamond at the Children's Hospital has also been active in the blood and blood-substitute field in so far as he has worked out the details of Rh typing materials and methods so as to facilitate these processes in the Armed Forces.

SHOCK AND BURNS

About 20 per cent of the contracts awarded Harvard University by the Office of Scientific Research and Development dealt with shock and burns and in this field much of the work has been carried out in the hospitals rather than in the Medical School itself. Professor Henry K. Beecher at the Massachusetts General Hospital studied the relationship of anesthetic agents to shock and the use of various anesthetics during or after recovery from shock, a program which he completed prior to his departure for active duty in the Mediterranean Theater.

Dr. Fine and his group at the Beth Israel Hospital have been very active in the investigation of shock throughout the war period. They have employed many ingenious techniques including the use of radioactive preparations of plasma protein and viviperfusion. His group has studied the problem of the "lost plasma" and the

changes in intermediary metabolism in shock with particular reference to those alterations which result from liver damage. Much of this work has been published and further accounts will no doubt be forthcoming as the work progresses.

Dr. Lewis Dexter at the Brigham Hospital investigated the rôle of the renal humoral pressor mechanism in shock in an effort to elucidate whether or not there was a spontaneous compensatory pressor response resulting from the renal ischemia of shock not unlike that emanating from the kidney made ischemic by other techniques.

Research on the treatment of burns has centered around the Boston City Hospital under the leadership of Dr. Charles C. Lund and Dr. F. H. L. Taylor, and at the Massachusetts General Hospital under Dr. Oliver Cope and his group. Both groups have been interested in burns, not only relative to local and systemic treatment but also from the fundamental point of view, concerning metabolic alterations in burns and shock. Dr. Lund and Dr. Taylor's group have studied various dressing techniques, vitamin requirements, and intermediary metabolism as well as the possible rôle of proteolytic enzymes in shock.

At the Massachusetts General research in burns has centered around three main approaches; the use of primary surgical excision and grafting, definition of the water and electrolyte changes and a quantitative study of the burn anemia using radioactive red cells in a fashion not unlike that used by Dr. Gibson in his blood preservation studies.

Dr. David Cogan at the Eye and Ear Infirmary has studied the effect of vesicant agents on the permeability of the cornea, conjunctiva, and sclera, a rather specialized feature of burn research having to do with the ocular damage produced by certain gases.

Dr. James Blodgett at the Peter Bent Brigham Hospital investigated the matter of skeletal attachments for prostheses in amputation cases, a problem of considerable surgical interest.

PHYSIOLOGY OF AIR COMBAT

In the Physiology Department, under the direction of Professor Eugene Landis, a study of the effects of available anti-“G” garments on cephalic blood supply in man was carried out as a part of the research program designed to help the air forces combat “black-out” in their pilots. Dr. William Lennox and Dr. Raymond Gibbs at the Boston City Hospital studied brain metabolism and brain function as effected by oxygen lack, and the use of electro-encephalographic data in the selection of air force personnel. Professor Alan Moritz of the Department of Legal Medicine studied injury to the lungs and air passages produced by low temperatures, a problem also related to conditions met by air force combat personnel.

The studies carried out by Professor George Thorn on the relation of the adrenal cortex to anoxia might also be considered as falling into this same group of studies primarily designed to help with the problems encountered by the air force. Further studies on the effect of anoxia on nerve cells as related to the oxygen content of the blood were also carried out by Professor Stanley Cobb at the MGH.

NERVOUS SYSTEM

In addition to the projects mentioned above, in which nervous system damage was studied with particular reference to anoxia, there were also several other contracts dealing with problems of the nervous system. Professor Derek E. Denny-Brown's department carried forth research on the post-traumatic cerebral syndrome encountered following head injuries. Their work included an inquiry especially into the relationship of this post-traumatic syndrome to the type and pathology of the injury and the personality factors in the patient. In addition to this project, the Department of Neurology at the City Hospital also studied the major nerve lesions produced by a continued pressure and by exposure to cold.

Dr. Hallowell Davis in the Department

of Physiology carried on a study of the effects of loud sounds with special reference to traumatic deafness.

INFECTIOUS DISEASES

The rôle of the Department of Bacteriology in war research was discussed in the last issue of this BULLETIN. Problems concerning tetanus, gonococcus, dysentery, and malaria were investigated. The malarial project was actually carried out in the Department of Biochemistry by Dr. Eric Ball where nutritional aspects, growth requirements and metabolic changes within the malaria parasite itself were investigated using the techniques both of bacteriology and tissue chemistry.

The work of Professor Joseph Aub and his associates on shock, carried out at the John Collins Warren Laboratories at the Massachusetts General Hospital in a sense may be considered as falling into this bacteriological category as their chief interest became directed towards the rôle of anaerobic infection in shock, and means of combatting the resultant toxemia.

APPRAISAL

It is virtually impossible at this early time to evaluate the long-term significance of all this research. Though carried on with the immediate objective of military applicability, much of the content of this research has fundamental implications of value for peacetime medicine.

Technical achievements of interest have been the rule in most of the problems investigated and these methods will find wide application in research of the future. Methods of protein fractionation without denaturation, the application of isotopes to a wide variety of problems, and the study of proteolytic enzymes in body fluids are but a few of the techniques furthered by this program.

The organization of this wartime research has been a matter of much interest to those engaged in it. Its administration has involved several features which cannot

help but promote efficient use of investigative personnel in medical research. In the first place, the projects have been adequately financed and where expensive technical methods were required, these have been readily available and it has been possible to subordinate financial considerations to the more important objectives of the research. Secondly, collaborative work has been carried out by men in various departments, bringing to the solution of a single problem techniques and skills which were quite varied in nature. Physicists, physical chemists, biologists, organic chemists, and physicians have worked together in such a way that each viewpoint and each special discipline reached its fullest application and productiveness. Thirdly, frequent conferences were arranged at which partially completed work and new ideas could be discussed tentatively. An example of such informal conferences has been the "Shock Dinner" held at monthly intervals throughout the war, sponsored by the Josiah Macy Jr. Foundation. These dinners have been held both in Boston and in New York and have given workers in the general field of burns, shock, and blood substitutes an opportunity to air their problems and their new ideas as soon as the problems developed or the ideas were born. Regular meetings were held in Washington under OSRD direction as a means of furthering the same type of interchange of ideas and providing an inventory of progress.

Such exchange of information has taken months and possibly years off the length of time necessary to obtain useful results. At these informal meetings it was realized by all concerned that findings presented or ideas discussed were tentative and subject to further corroboration or elaboration; the investigator did not have the feeling that whatever he said must be accepted as final. For this reason, ideas and techniques could be changed and modified as problems progressed and much good came from such informal and frank discussion of investigative problems.

Though peace has now come, it would

seem apparent that these advances in methods of research must have a permanent place in the medical world and it is possible that over the long term the greatest service to medical investigation performed by the Office of Scientific Research and Development will have been in the establishment of these three important features of productive scientific research: adequate financing, intelligent collaboration, and frequent progress inventories.

REVIEW COURSE FOR MEDICAL OFFICERS

Beginning on February 15, 1946 a special course for graduates will be given at HMS, designed for the returning veteran who wishes to review the fundamental sciences as they bear on the problems of clinical medicine.

The detailed plans for this course have been worked out by a permanent committee formed to advise the Dean on graduate instruction. This committee consists of Dr. Chester Jones, Dr. Eugene Landis, Dr. Fiorindo Simeone, and Dr. Charles Jane-way. Dr. Eugene Eppinger, recently appointed Assistant Dean in Charge of Courses for Graduates, will put into effect the provisions worked out by this committee.

This course will be a unique medical review. It is to be organized not by specialties such as medicine, surgery, and pediatrics; not by sciences such as pharmacology, biochemistry, physiology; but instead according to the systems of the body. Two to four weeks each will be spent on the cardiovascular system, gastro-intestinal system, respiratory tract, endocrine glands, genito-urinary system, skeletal system, blood and blood-forming organs, immunology, chemotherapy, neurology, psychiatric aspects of general medicine, and, finally, industrial hazards and the social aspects of medicine.

With respect to each system of the body, the course will be organized so that in the morning lectures are given on the basic science aspects of the subject. In this way,

the anatomy, physiology, biochemistry, pathology and pharmacology of each system will be discussed and recent advances stressed. Also in the mornings general clinics will be held at which these fundamental aspects of the subject will be brought to bear on the problems of the patient.

In the afternoons the men taking the course will be divided into smaller groups to work at the various hospitals on the clinical aspects of the system being reviewed; they will have personal contact with patients.

The objective of this course is to integrate the many aspects of present-day medicine rather than to separate these aspects into small special categories. It is hoped to promote a return to fundamentals and to relate the basic sciences to everyday clinical problems, rather than furthering a division of clinical problems into small specialties, a trend quite obvious in many of the postgraduate courses given in the country today.

Clinical work will be carried out at the Peter Bent Brigham Hospital, Children's Hospital, Massachusetts General Hospital, Boston City Hospital, and Beth Israel Hospital. A special group of ten men in the course will be enrolled as students with a special interest in pediatrics and they will spend their afternoons at the Children's Hospital. The others, however, will maintain a broad contact with the whole course with little regard to specialization.

It is planned to instruct a total of seventy men. Of these, ten, as mentioned above, will have a special interest in pediatrics. The remaining sixty men in the general course will not all be enrolled at once. Instead, an initial thirty-five men will take the course starting February 15, 1946 and thereafter five new men will join the course each month. The length of the course, for any one student, will be six months, and in this fashion it will be possible for men to "hop on" the course while it is in progress over a period of months, and the course can be continued as long as its continuance is justified by the need of

returning veterans for further instruction. This will constitute the chief graduate course given by the Medical School during the next year or so.

This course will be conducted like any other in the curriculum as concerns participation by the students in the presentation of reports and reviews. A comprehensive examination will be held at the end. In order to receive credit for the course, a passing grade must be obtained in the examination.

The tuition and fees for the course will be covered by the provisions of the "G. I. Bill of Rights."

It is safe to say that this plan will fill the need of the returning veteran for "academic rehabilitation" in medicine. It may also point a new direction for the handling of the entire problem of postgraduate instruction in war or peace.

ETHER CENTENARY

October 16th next will mark the one hundredth anniversary of the first public demonstration of the use of ether for surgical anesthesia, carried out by Dr. Morton in the Ether Dome of the Bulfinch Building at the Massachusetts General Hospital. Controversy has raged on the subject of to whom and to which institution should go the credit for priority in this discovery; recently, a motion picture on the subject of this momentous event was made, but neither the motion picture nor the controversy could be regarded as a fitting tribute to the magnitude of the original accomplishment. In 1933 a motion picture, designed for use at the Chicago World's Fair, was made at the MGH which retraced the steps in the epoch-making discovery with reasonable historical accuracy. This short picture, however, was never widely shown to the public. At the present time a book dealing with Dr. Morton's work and the details of his discovery is under preparation by Mrs. W. W. Ford and in this work many historical facts, not previously available to the general public will be described.

None of these activities, however, do justice to the one hundredth anniversary of a discovery which opened up an entirely new realm in surgery. For that reason plans are now being made for a suitable commemoration of that important event of 1846. The occasion will be used not only to celebrate a past discovery, but also to bring to the attention of the medical profession, the government, and the general public the fact that medical research and discoveries have a social and economic significance which justify their fullest support.

As the plans stand now the celebration will be a three-day affair on October 14, 15, and 16, 1946. On each of these three days a series of scientific symposia will be conducted at the hospital. These symposia are, in a sense, modeled after the much more extensive scientific program carried out at the Harvard Tercentenary. The objective is to bring together for consideration the present-day trends of investigation, not only in anesthesia and surgery, but also in all of the basic sciences which bear on medicine. One symposium will be devoted to historical developments. The remainder will deal with scientific research and clinical investigation.

On the evening of Monday, October 14th, a dinner of the Alumni Association of the Massachusetts General Hospital will be held and on the evening of October 16th in Sanders Theater at Harvard University a large open meeting will be conducted which will be the climax of the celebration. Speakers for this meeting are being selected with an eye towards the interests of the public as well as their scientific and medical accomplishments. Bishop Sherrill will preside, President Conant will be one speaker, and Dr. Henry K. Beecher, Henry Isaiah Dorr Professor of Anesthesia at HMS will be another; additional speakers will later be added to the program. Dr. Reginald Fitz will act as Marshal.

Further details of this hundredth anniversary celebration are being worked out and will be described more fully in later issues of the BULLETIN.



BRIG. GEN. JAMES S. SIMMONS

DEVELOPMENTS IN SCHOOL OF PUBLIC HEALTH

Brig. Gen. James Stevens Simmons, U.S.A., Chief, Preventive Medicine Service, Office of the Surgeon General, has been appointed Dean of the School of Public Health. He is expected to assume his new duties on July 1, 1946.

Brig. Gen. Simmons received the Distinguished Service Medal on Nov. 19, 1945. The citation accompanying the medal reads, in part: "Brig. Gen. Simmons rendered exceptionally meritorious service in a duty of heavy responsibility as Chief of the Preventive Medicine Service, Office of the Surgeon General, from November, 1939, to August, 1945. The service he organized and developed carried out a world-wide program of military and civil public health which secured both immediate and enduring benefits by reducing hazards to the health of troops, civilians engaged in essential war work, and refugees and displaced persons."

"By applying the best available knowledge and fostering research, he developed and extended new information on the

causes and prevention of communicable diseases, on the improvement of nutrition for soldiers and on the reduction or elimination of the health hazards of mechanized warfare and industrial occupations."

General Simmons, a close friend of Dr. Edward G. Huber, acting Dean of the School of Public Health, has long been noted as a bacteriologist, researchist and expert in tropical medicine, study of which is expected to increase at Harvard.

He was born in Newton, N. C., June 7, 1890, received a Bachelor of Science degree at Davidson (N. C.) College in 1911, and his medical degree at the University of Pennsylvania in 1915. In 1917 he was graduated by the Army Medical School. He received a Ph.D. degree from George Washington University Medical School in 1934 and the degree of Doctor of Public Health from the Harvard School of Public Health in 1939. Honorary science degrees have been awarded by Duke University and the University of Pennsylvania.

After serving in the University of Pennsylvania medical laboratories and hospital, Dean Simmons became a first lieutenant in the Army Medical Corps in 1916. From 1917 to 1924, he was chief of laboratory services in various U. S. Army hospitals and commanding officer of departmental laboratories. From 1924 to 1928, he served as chief of the bacteriological department, Army Medical, Dental and Veterinary Schools, and in 1930-34, he was chief of the department of bacteriology, Army Medical School.

The new dean has lectured and written extensively on experimental bacteriology, preventive medicine and tropical medicine, is a member of numerous scientific societies including Sigma Xi, has served on many medical and scientific committees, has edited various medical publications and is a member of the advisory committee of the National Foundation for Infantile Paralysis. He received the Sternberg Medal in 1940 and the Sedgwick Memorial Medal in 1943. Last November he was elected president of the American Academy of Tropical Medicine and also

of the American Society of Tropical Medicine.

The Rockefeller Foundation has granted \$1,000,000 for expenses of the School of Public Health from July 1, 1946, to June 30, 1956, and Harvard University has set aside an additional sum of \$750,000 as an endowment for the School, to supplement the present endowment fund. In a re-organization intended to make this one of the outstanding research and teaching institutions in the world, the School of Public Health will have co-equal status in the University with the Harvard Medical School and other professional divisions.

In addition to its present marble building at 55 Shattuck Street, Boston, the School of Public Health will occupy the Harvard-owned Collis P. Huntington Memorial Hospital, nearby, which was used before the war for cancer and tumor research and during the war by the government for secret experiments. Acquisition of this hospital, which is to be remodeled will give the School an additional 40,000 square feet of floor space.

Among the purposes of the School is advanced professional training of highly qualified men for positions in public health research, training and administration. Its laboratories, some of which will be moved to the Huntington Hospital, include installations for study of atmospheric, chemical and physiological problems. They have been extensively used for governmental war agencies, particularly in regard to physiologic problems engendered by the airplane and the submarine.

Close relationship of the School with civil problems, expected to be increased under General Simmons, is indicated by some of its activities. These include sanitary engineering, preventive medicine and hygiene, tropical medicine, parasitology, mother hygiene, communicable diseases, ventilation and illumination, vital statistics, epidemiology and research in connection with the work of state departments of health, mental diseases and penal institutions, as well as with departments of economics, sociology and psychology.

Psychosomatic Medicine

STANLEY COBB, '14

The mind-body problem is as old as philosophy and as unsettled as any problem in dialectics. For the medical man, however, who defines mind as the output of the functioning brain and the brain as part of the body, there is no problem. The body is a working unit and the fact that the brain produces thoughts when it functions is no more marvelous than that the contracting muscle produces lactic acid. It is only more complicated. Moreover, we know less about the physiology, and this bothers us, but somehow we are not half as bothered because we don't know all the steps in the production of energy by muscular contraction. The trouble is that the introspective philosopher steps in and says neurotically: "But you can't think about thinking!" and then proceeds to confuse us with logical deductions based on unproved assumptions. It is my contention that one can think about thinking and about emotions just as objectively as one can think about thyroid hormones or appendicitis. There is inevitably a great subjective element in all observations; the man who looks through a microscope at a section of appendix "bears behind him the whole of his past." He makes his diagnosis in the light of his personal development at that moment. Part of this development is his medical training. The specimen is objective enough, but the man who looks at it makes a good or bad diagnosis in a very personal way. Looking at things, i.e., receiving light on the retina, is a personal and subjective phenomenon. In medicine we have become used to this source of error and standardized it as well as possible. When we attack psychological problems we are likely to be scared off by the complexity and by the taboos of the philosophers. Thus one may be diverted from a simple and direct approach and drift off into vague statements and wordy pronouncements. This is the curse of

psychiatry. I believe that a good, dependable job can be done in psychological medicine by devising and applying good methods of observation. These observations can be just as objective (no more, no less) as observations through a microscope, a spectroscope or any other 'scope, and they must be judged by the same laws of science; but controls are more difficult because of the complexity. This makes investigation in the psychological sphere of medicine difficult and advance slow, but to the worker in this field, it is fascinating and rewarding.

Psychosomatic medicine is as old as Plato and as young as the formation of the "American Society for Research in Psychosomatic Problems" in New York three years ago. At Harvard Medical School there is a long tradition of sympathetic and keen understanding of the psychological aspects of medical disorders. Oliver Wendell Holmes in his three "medicated novels" ("Elsie Venner," "A Mortal Antipathy," and "The Guardian Angel")¹ shows that he well understood the effect of social and personal problems on health. He even said that he put these observations into novels rather than into medical treatises because the medical profession was not yet ready to accept such ideals! He wrote in 1867: "If we cannot follow the automatic machinery of nature into the mental and moral world, where it plays its part as much as in the bodily function, without being accused of laying 'all that we are evil in to a divine thrusting on' we had better return at once to our old demonology and reinstate the Leader of the Lower House in his time honored prerogatives."

In 1895 Robert T. Edes (a great physician who missed being a professor of medicine because of illness in his family, and who finally became the physician in charge of the Adams House in Jamaica Plain)

wrote the "New-England Invalid,"² a classic description of psychosomatic phenomena in a special type of woman commonly seen in these parts. It can still be read with profit by all of us. The first professor of Neurology, James Jackson Putnam, kept up the tradition by writing "Not the Disease only but also the Man"³ in 1899 and by being one of the first Americans to attend to the teachings of Freud. Since then many Harvard teachers have emphasized the importance of social and emotional factors in medical practice, notably Richard Cabot, Edsall, Peabody and Southard. Indeed Walter Cannon may be said to have been the father of psychosomatic medicine. By his long study of the physiology of the emotions, he not only illuminated the clinical problems, but he made the study of psychology a respected discipline among medical men. Pavlov, who also greatly advanced psychosomatic research, would never allow the word "psychology" to be used in relation to his work! I agree with him that it can all come under the heading of "physiology," but I do not see why dividing off the more complex reactions of the brain into a sub-department of "psychology" makes them any less respectable.

Lastly, in 1945 comes Carl Binger's book "The Doctor's Job."⁴ We can lay some claim to the author since he was Harvard College 1910 and Harvard Medical School 1914, Massachusetts General Hospital 1916 and did some teaching with Lawrence Henderson. His book contains in Chapters IV through XI the best exposition I know of psychosomatic medicine and what it is all about. The author had a long and arduous training in internal medicine and only later in life studied psychiatry, so his statements are careful. He never says that psychological stress causes medical disease, but points out that it may be one of many factors, perhaps an important factor, and at least one that can be treated. It may be a matter of the threshold, above which symptoms will appear. Psychological states have much to do with our thresholds

for sensations and more complex perceptions. (Experiments have shown that in some people the perception of pain can be eliminated by hypnosis.) A worshipper of the Pathology of the Dead House might say that Dr. Binger put too much emphasis on psychosomatic and psychiatric problems, when, in a book on the practice of medicine he used approximately 100 pages out of 250 on these and allied problems. One has only to ask the practitioners of medicine to see that he made no mistake. They will often tell you that over half of their practice is the treatment of "functional disorders."* One has only to look up the Army statistics in many hospitals, induction centers and separation centers to see that psychiatric and psychosomatic problems lead all others. The need for information and teaching about these subjects is great and Binger's book does it well, from his important discussion of the patient-physician relationship to his remarks on the "cause" of tuberculosis in a man.

The present teachers of medicine at Harvard have long taken an interest in the psychological aspects of their patients' troubles. Dr. Means was a pioneer in the psychosomatic field when he had William Herman attached to his medical wards as psychiatrist in 1926 and added a Psychiatric Service to the Massachusetts General Hospital in 1933. Dr. Minot in 1930 had teaching exercises at the City Hospital where internist, psychiatrist and social workers met to discuss cases. For ten years Dr. Chester Jones and I have been giving a voluntary course in Psychosomatic Medicine. Starting in 1934 with nine students it has grown to 135 in 1944. At the Beth Israel Hospital, Dr. Blumgart had regular meetings where psychiatrist and internist

*By "functional" they mean disorders of "nervous origin" or psychogenic symptoms. They use the term as slang, not thinking about physiology, because speaking from the physiological point of view *all* medical symptoms are due to disordered function and are therefore "functional."

conferred and taught students at the bedside. These were interrupted by the war but will soon be under way again. The Brigham is planning to have a psychiatrist on its medical wards. The development is not confined to medical services. Dr. Churchill has written a paper on the psychologic aspects of bronchiectasis.⁵ Drs. Meigs and Finesinger⁶ have joined in a paper on hermaphroditism and Drs. Moore and Lindemann are working on ulcerative colitis, to mention a few examples of surgical coöperation.

Indeed a lot of teaching is going on. It goes without saying that the Psychiatric Department at the Boston Psychopathic and McLean Hospitals have been steadily working towards this for years and we are pleased with the improvements. There is still much to be done. In order to teach psychiatry properly we need established psychiatric teaching units at all the general hospitals mentioned. So far, only the one at the Massachusetts General Hospital is functioning adequately. More money is needed to get the others going so we can teach small groups of third and fourth year men at each hospital.

There are some negative aspects to the psychosomatic problem that I would like to stress:

In the first place psychosomatic medicine is not a new subject. It is merely a new name for an old point of view. The only excuse for the new name is that it gives one a short term to designate a growing and active field of interest. If the term leads to the attitude that here is a new "discipline" to be taught by special groups who will give a diploma, it is doing a disservice to medicine.

In the second place, it is not a specialty. One cannot make a specialty of coöperation without leaving the ranks of the worker and becoming a propagandist! And the essence of psychosomatic medicine is the coöperation of workers in medicine, surgery, dermatology, etc., with workers in psychiatry—each doing his share and together treating the patient. Psychosomatic practice emphatically is *not* the taking over of

the treatment of medical disorders by the psychiatrist.

Thirdly, research in Psychosomatic Medicine is *not* importantly concerned with trying to find out what "psychological types" of people are likely to have what medical ailments. Much work has been done on this line but it has largely overshot the mark and allowed plausible verbalizations to replace dependable data. Just as phrenology was oversold 100 years ago and has now been boiled down to a scientific residuum of true cerebral localization. One cannot make a diagnosis from a psychologist's "thumbnail sketch" of the personality.

Psychosomatic medicine is, however, important and expanding. We can show the student good evidence that grief, repressed anger, frustration and fear are bad for medical as well as mental hygiene. The need is for accurate studies of Holmes' "automatic machinery of nature," studies of the chemical and autonomic effects of the emotions on bodily functions, and the effects of chronic dysfunction on tissues. We must learn the sequence of events in these pathological processes, and where to interrupt the process surgically or medically, as well as how to remove or alleviate the environmental causes. Then this coöperative effort will come into its own and one will not have to call it psychosomatic medicine any longer—it will be part of good medical practice.

-
1. Oberndorf, C. P. *Psychiatric Novels of Oliver Wendell Holmes*. Col. Univ. Press. 1943, p. 268.
 2. Edes, Robert T. *New-England Invalid*. David Clapp and Son. Boston 1895, 57 p.
 3. Putnam, James J. *Boston Medical and Surg. Jour.* 141:53, 1899.
 4. Binger, Carl. *The Doctor's Job*. W. W. Norton Co., New York, 1945, 235 p.
 5. Churchill, E. D. *Bronchiectasis: physical and psychologic manifestations*. *New Eng. J. Med.* 218:97, 1938.
 6. Finesinger, J. E., Meigs, J. V., and Sulko-witch, H. W. *Clinical, psychiatric and psychoanalytic study of a case of male pseudo-hermaphroditism*. *Am. J. Obs. and Gyn.* 44:310, 1942.



Military News



The following list brings graduates who have been in the service to a total of 1,849.

1912

Capt. Whitman K. Coffin, Navy, U. S. Navy Yard, Charlestown, Mass.

1914

Lt. Col. Joseph P. Cohen, Army, APO 413, N.Y.C.

1916

Lt. Col. Edward Harding, Army, Conv. Hosp., Camp Edwards, Mass.

Major William A. Perkins, Army, APO 466, N.Y.C.

1917

Capt. Walter J. Pennell, Navy, U.S.N.H., Newport, R. I.

Major Nathan Rosenberg, Army, Vet. Hosp., Columbia, S. C.

1919

Lt. Col. James Greenough, Army, Reg. Hosp., Ft. Monmouth, N. J.

1920

Capt. David D. Greene, Navy, U.S.N.H., Quantico, Va.

Lt. Col. Joseph M. Looney, Army, APO 562, N.Y.C.

1921

Capt. Harold R. Merwarth, Navy, U.S.N.H., Brooklyn, N. Y.

1922

Comdr. Harry I. Bixby, Navy, U.S.N.H., Chelsea, Mass.

1923

Comdr. Thomas B. Murphy, Navy, FPO, San Francisco

Comdr. Edward J. Reynolds, Navy, U.S.N.H., Brooklyn, N. Y.

Col. Horatio Rogers, Army, Cushing Gen. Hosp., Framingham, Mass.

1924

Lt. Col. Philip S. Foisie, Army, U.S.A. Gen. Hosp., Camp Edwards, Mass.

Comdr. John T. Jenkin, Navy, U.S.N.H., Oakland, Calif.

Comdr. J. Lester Kobacker, Navy, U.S.N.H., Ft. Eustis, Va.

Col. Ashley W. Oughterson, Army, APO 500, San Francisco

Comdr. James L. Smead, Navy, U.S.N. Special Hosp., Springfield, Mass.

Comdr. Franklin C. Southworth, Jr., Navy, U.S.N.T.C., Sampson, N. Y.

1925

Lt. Col. Herbert H. Darling, Army, Vet's. Adm., Fort Miley, San Francisco

Capt. James R. Fulton, Navy, FPO, San Francisco

Comdr. Raymond A. McCarty, Navy, U. S. Naval Academy, Annapolis, Md.

1926

Comdr. Wilmer W. Angell, Navy, FPO, San Francisco

Comdr. Russell Fletcher, Navy, U.S.N.H., Oakland, Calif.

Comdr. William J. German, Navy, FPO, San Francisco

Comdr. Gerald H. Gray, Navy, U.S.N.H., Corona, Calif.

Capt. James S. Rooney, Navy, U.S.N. Special Hosp., Springfield, Mass.

Capt. Shelton P. Sanford, Navy, Receiv. Sta., Terminal Island, San Pedro, Calif.

Lt. Col. Richard P. Stetson, Army, 4th Service Command, Atlanta, Ga.

1927

Lt. Comdr. Henry Caradonna, Navy, So. Boston Dry Dock Dispensary, So. Boston

Lt. Col. William H. Dunn, Army, 5th Service Command, Fort Hayes, Ohio

Comdr. Herbert L. Elias, Navy, FPO, San Francisco

Lt. Col. George H. Houck, Army, AAF Reg. and Conv. Hosp., Santa Ana, Calif.

Capt. Abraham Kaplan, Navy, U.S.N.H., St. Albans, N. Y.

Lt. Comdr. Samuel S. Shouse, Navy, FPO, San Francisco

Comdr. Edward H. Taylor, Navy, Naval Dry Docks, San Pedro, Calif.

Comdr. Maurice M. Tolman, Navy, U.S.N.H., Long Beach, Calif.

Comdr. John W. Whitsett, Navy, U.S.N.H., Long Beach, Calif.

1928

*Lt. Comdr. Melville D. Dickinson, Jr., Navy, FPO, N.Y.C.

Capt. Richard W. Dwight, Navy, U.S.S. President Monroe

Capt. Ralph E. Fielding, Navy, Sep. Cen., Roosevelt Base, San Pedro, Calif.

Capt. John S. Hathaway, Army, APO 334, San Francisco

Capt. William H. Perry, Navy, U.S.N.H., Chelsea, Mass.

Major Robert Ulin, Army, Lovell Gen. Hosp.,
Fort Devens, Mass.

1929

Capt. Jackson Flanders, Army, Sta. Hosp., Camp
Stoneman, Calif.
Lt. Col. Edward C. Pallette, Army, APO 192,
N. Y. C.
Lt. Col. Edward Parnall, Army, Battery Gen.
Hosp., Rome, Ga.
Major George W. Rafferty, Army, APO 494,
N. Y. C.
Lt. Comdr. Frederic N. Tyroler, Navy, U.S.N.H.,
Long Beach, Calif.

1930

Major William B. Nevius, Army, Lovell Gen.
Hosp., Ft. Devens, Mass.
Lt. Col. Norman W. Thiessen, Army, APO 465,
N. Y. C.

1931

Major John W. Canady, Army, Welch Conv.
Hosp., Daytona Beach, Fla.
Comdr. John R. Parish, Navy, 12th Naval Dis-
trict, San Francisco
Lt. Col. Milton S. Thompson, Jr., Army, Mc-
Closkey Gen. Hosp., Temple, Tex.

1932

Major John C. Angley, Army, Bolling Field,
D. C.
Major Walter S. Jones, Army, APO 689, N.Y.C.
Major Jesse S. Parker, Army, APO 887, N.Y.C.
Lt. Comdr. Willard B. Rew, Navy, U.S.N.H.,
Oakland, Calif.

1933

Major Archibald C. Cohen, Army, Vet. Adm.,
Aspinwall, Pa.
Lt. John J. D'Urso, Navy, N.T. & D.C., Shoe-
maker, Calif.
Lt. Comdr. Howard C. Jackson, Navy, U.S.N.H.,
Bainbridge, Md.
Lt. Col. Christopher G. Parnall, Jr., Army, Moore
Gen. Hosp., Swannanoa, N. C.
Lt. Col. Herbert S. Ripley, Jr., Army, APO 920,
San Francisco
Lt. Comdr. John L. Ward, Navy, District Med.
Off., Great Lakes, Ill.

1934

Major Lawrence H. Beizer, Army, APO, N.Y.C.
Capt. Lewis L. Huston, Army, Reg. Hosp., Ft.
Jay, N. Y.
Major Octa C. Leigh, Jr., Army, Walter Reed
Gen. Hosp., Washington
Lt. Col. Grant L. Otis, Army, APO 887, N.Y.C.
Lt. Comdr. Frederic Tudor, Navy, U.S.N.H.,
Corona, Calif.
Major Richard G. Whiting, Army, U. S. A. Gen.
Hosp., Camp Butner, N. C.

1935

Major Edmund J. Croce, Army, Halloran Gen.
Hosp., Staten Island, N. Y.
Lt. Comdr. Maxon H. Eddy, Navy, U.S.N.H.,
Fort Eustis, Va.
Major Richard H. Mellen, Army, O'Reilly Gen.
Hosp., Springfield, Mo.
Major Joseph Ney, Army, Pentagon Bldg., Wash-
ington
Major Donald E. Stafford, Army, APO 958, San
Francisco
Lt. Comdr. Harmon J. Truax, Navy, FPO, San
Francisco
Capt. Charles A. Wheeler, Army, APO 513,
N. Y. C.
Lt. Comdr. George P. Whitelaw, Navy, FPO,
San Francisco

1936

Major Harwood W. Cummings, Army, Sta.
Hosp., Bowman Field, Ky.
Capt. Marlow B. Harrison, Army, Camp Sibert,
Ala.
Major Donald R. Hayes, Army, APO 513,
N. Y. C.
Lt. Col. Robert L. Richards, Army, APO 512,
N. Y. C.

1937

Major Sidney Cohen, Army, APO 403, N. Y. C.
*Capt. Rodney B. Hearne, Army, APO 403,
N. Y. C.
Lt. Elliott S. Hurwitt, Navy, U.S.N.H., Samp-
son, N. Y.
Lt. Comdr. Theodore H. Lee, Navy, Newport,
R. I.
Comdr. Ralph C. Parker, Jr., Navy, Navy Dept.,
Washington
Capt. William W. Tribby, Army, Army Med.
Sch., Washington

1938

Comdr. Lynn S. Beals, Jr., Navy, NAS, Anacos-
tia, D. C.
Major Charles B. Burbank, Army, APO 523,
San Francisco
Lt. Col. Francis F. Cary, Army, APO 627,
N. Y. C.
Comdr. Charles S. Hascall, Jr., Navy, FPO, San
Francisco
Comdr. Hunt B. Jones, Navy, FPO, San Fran-
cisco
Comdr. Reginald R. Rambo, Navy, FPO, San
Francisco
Major Dean K. Rizer, Army, APO 513, N. Y. C.
Major Charles A. Robinson, Army, APO 629,
N. Y. C.
Capt. Hugh Tatlock, Army, Camp Detrick, Md.
Capt. Richard H. Upjohn, Army, Mayo Gen.
Hosp., Galesburg, Ill.
Major Joseph E. Warren, Army, APO 472,
N. Y. C.

1939

- Lt. Comdr. John E. Adams, Navy, Shoemaker, Calif.
 Capt. Alexander H. Bill, Jr., Army, Welsh Conv. Hosp., Daytona Beach, Fla.
 Capt. Lemuel Bowden, Jr., Army, Maxton AAB, Maxton, N. C.
 Lt. Edward V. Ferguson, Navy, Naval Ordnance Depot, Louisville, Ky.
 Major Arthur S. Pier, Jr., Army, APO, N. Y. C.
 Capt. William S. Piper, Jr., Army, Reg. & Conv. Hosp., Miami Beach, Fla.
 Comdr. John F. Roach, Navy, U.S.N.H., Chelsea, Mass.
 Capt. Robert S. Srigley, Army, Hammond Gen. Hosp., Modesto, Calif.
 Capt. Alvin T. Stone, Army, APO 73, San Francisco
 Lt. Comdr. Walter I. Tucker, Navy, NAS, Alameda, Calif.
 Major Robert M. White, Army, APO 63, N.Y.C.

1940

- Lt. Addison G. Brenizer, Jr., Army, Madigan Gen. Hosp., Ft. Lewis, Wash.
 Capt. Bernard German, Army, APO 755, N.Y.C.
 Capt. Willard T. Hill, Army, APO 758, N.Y.C.
 Capt. Henry M. Lemon, Army, APO, N. Y. C.
 Capt. James H. Mithoefer, Army, Wakeman Gen. Hosp., Camp Atterbury, Ind.
 Lt. Comdr. Edward M. Ohaneson, Navy, 224 Portland St., S.E., Washington
 *Lt. (j.g.) Thomas A. Ritzman, Navy, Sasebo Bay, Japan
 Capt. Thomas H. Weller, Army, APO 851, Miami, Fla.
 Lt. Comdr. William A. White, Jr., Navy, FPO, N. Y. C.

1941

- Capt. Edward H. Ahrens, Jr., Army, Mitchel Field, N. Y.
 Lt. Max G. Carter, Navy, U.S.N.H., Chelsea, Mass.
 Capt. Crawford H. Hinman, Army, overseas
 Lt. (j.g.) Karl A. Lofgren, Navy, U.S.N.H., Chelsea, Mass.
 Capt. John G. Mebane, Army, APO 887, N.Y.C.
 Lt. John W. Raker, Navy, Hotel Beaumont, Beaumont, Tex.
 Capt. Thomas S. Risley, Army, Vet. Adm., Hines, Ill.
 Lt. Comdr. Charles W. Sprunt, Navy, 150 Causeway St., Boston
 Lt. William O. Thomas, Jr., Navy, Boston Navy Yard, Boston
 Lt. Comdr. Jason L. Wiley, Jr., Navy, NAS, Quonset Point, R. I.
 Major Donald J. Winslow, Army, APO 442, San Francisco

1942

- Lt. Robert W. Gage, Navy, U.S.N. Personnel

Separ. Cen., Bainbridge, Md.

Capt. Lucien C. Kavan, Army, Randolph Field, Tex.

Capt. John B. Millet, Army, Cushing Gen. Hosp., Framingham, Mass.

Lt. David G. Neander, Navy, Receiving Sta., N.O.B., Norfolk, Va.

Lt. John H. Peters, Navy, U.S.N.H., Dublin, Ga.

Capt. Harlow G. Richards, Army, APO 75, San Francisco

Lt. John Shoukimas, Navy, FPO, San Francisco
 Lt. (j.g.) James H. Strauch, Navy, FPO, San Francisco

Lt. Leslie R. Webb, Jr., Navy, FPO, San Francisco

Capt. Carrington Williams, Jr., Army, Wm. Beaumont Gen. Hosp., El Paso, Tex.

1943 (March)

- Lt. Robert W. Albright, Navy, FPO, San Francisco
 Capt. Henry F. Allen, Army, APO 360, N.Y.C.
 Lt. Robin G. Anderson, Army, 122nd Evac. Hosp.
 Lt. (j.g.) Stuart M. Anderson, Navy, FPO, San Francisco
 Capt. Rafe Banks, Jr., Army, APO 205, N. Y. C.
 *Capt. Frederick C. Bauer, Jr., Army, Northport, L. I., N. Y.
 Capt. Morgan Berthrong, Army, APO 78, N.Y.C.
 Capt. Richard A. Betts, Army, APO 78, N.Y.C.
 Capt. Robinson L. Bidwell, Army, APO 666, San Francisco
 *Lt. Hathorn P. Brown, Army, Lawson Gen. Hosp., Atlanta, Ga.
 Lt. John W. Cederquist, Navy, FPO, San Francisco
 Capt. Joseph D. Enterline, Army, APO 181, San Francisco
 Lt. Calvin M. Gordon, Navy, Transport, FPO, San Francisco
 Capt. Oscar W. Hills, Army, APO 75, San Francisco
 Capt. Joseph P. Holihan, APO 513, N. Y. C.
 Capt. Irving M. London, Army, Moore Gen. Hosp., Swannanoa, N. C.
 Lt. Henry D. Moorman, Jr., Navy, FPO, San Francisco
 Lt. Howard A. Naquin, Navy, R.O.T.C., Corvallis, Ore.
 Capt. Richard J. Palmer, Army, APO 75, San Francisco
 Lt. Gardiner Pier, Army, APO 21234, San Francisco
 Capt. Calvin H. Plimpton, Army, Tilton Gen. Hosp., Fort Dix, N. J.
 *Lt. Robert D. Ray, Army, Tilton Gen. Hosp., Ft. Dix, N. J.
 Capt. Edward P. Richardson, Jr., Army, APO 957, San Francisco
 *Lt. Grant V. Rodky, Army, Sta. A., Hattiesburg, Miss.

- Lt. Charles T. Ryder, Jr., Army, Crile Gen. Hosp., Cleveland, O.
 Lt. Royal S. Schaaf, Army, England Gen. Hosp., Atlantic City, N. J.
 Lt. Cornelius J. Shea, Navy, FPO, San Francisco
 Capt. Robert P. Smith, Army, Ft. Jackson, S. C.
 Capt. Kenneth S. Tanner, Jr., Army, Camp Sibley, Attalla, Ala.
 Lt. George H. Tarr, Jr., Navy, FPO, San Francisco
 Lt. DeWitt S. True, Navy, FPO, N. Y. C.
 Lt. James F. Ward, Navy, FPO, San Francisco
 Capt. Richard N. Westcott, Army, APO 513, N. Y. C.
 Lt. Chester A. Wiese, Jr., Navy, FPO, San Francisco

1943 (December)

- Capt. Christopher T. Bever, Army, Reg. Hosp., Camp Lee, Va.
 Lt. James D. Clement, Jr., Army, Sep. Cen., Camp Atterbury, Ind.
 Lt. Lytt I. Gardner, Army, APO 75, San Francisco
 Capt. Joel C. Goldthwait, Army, APO 6, San Francisco
 *Lt. (j.g.) Thomas L. Murphy, Navy, FPO, San Francisco
 Lt. Edmund C. Peirce, II, APO 247, San Francisco
 Capt. David Stiles, Army, England Gen. Hosp., Atlantic City, N. J.
 Capt. Allan B. Stimson, Army, APO 88, N.Y.C.
 Lt. Frank E. Trobaugh, Jr., Army, Lovell Gen. Hosp., Ft. Devens, Mass.

1944

- *Lt. (j.g.) Henry T. Bahnsen, Navy, FPO, San Francisco
 *Lt. (j.g.) Charles S. Ballinger, Navy, FPO, San Francisco
 *Lt. Lewis A. Barness, Army, Baxter Gen. Hosp., Spokane, Wash.
 *Lt. (j.g.) Albert C. Biegel, Navy, FPO, San Francisco
 *Lt. (j.g.) Gaston E. Blom, Navy, FPO, Baltimore
 *Lt. (j.g.) Warren C. Breidenbach, Jr., Navy, FPO, San Francisco
 *Lt. John R. Chambliss, Army, Camp Upton, N. Y.
 *Lt. Seth C. Crocker, Army, Ft. Dix, N. J.
 *Lt. Edward A. Doisy, Jr., Army, Ft. Dix, N. J.
 *Lt. Robert J. Fallon, Army, Ft. Dix, N. J.
 *Lt. Frederick R. Gilmore, Army, Ft. George Meade, Md.
 *Lt. John W. Harris, Army, Camp Joseph T. Robinson, Ark.
 *Lt. Felix Heimberg, Army, Reg. Hosp., Truax Field, Wis.
 *Lt. Alfred Jaretski, III, Army, Reg. Hosp., Fort Knox, Ky.

- *Lt. (j.g.) Ben B. Johnson, Navy, Sep. Cen., Shoemaker, Calif.
 *Lt. William F. Ketchum, Army, Ft. Benjamin Harrison, Ind.
 *Lt. Walter S. Kimball, Army, Ft. Warren, Cheyenne, Wyo.
 *Lt. Francis A. Kirby, Jr., Army, Madigan Gen. Hosp., Ft. Lewis, Wash.
 *Lt. Robert Z. Klein, Army, Kelly Field, San Antonio, Tex.
 *Lt. (j.g.) David M. Little, Jr., Navy, Sep. Cen., Terminal Island, San Pedro, Calif.
 *Lt. (j.g.) Willard A. Litzenberger, Navy, Sep. Cen., Lido Beach, N. Y.
 *Lt. (j.g.) Samuel G. McClellan, Navy, FPO, San Francisco
 *Lt. John G. McConahy, III, Army, Crile Gen. Hosp., Cleveland, O.
 *Lt. Robert L. McLaurin, Army, Walter Reed Gen. Hosp., Washington
 *Lt. (j.g.) Keith Merrill, Jr., Navy, Puget Sound Navy Yard, Wash.
 *Lt. Wallace E. Miller, Army, Mayo Gen. Hosp., Galesburg, Ill.
 *Lt. Robert L. Phifer, Army, Mayo Gen. Hosp., Galesburg, Ill.
 *Lt. (j.g.) Gardner C. Quarton, Navy, FPO, San Francisco
 *Lt. Alexander Randall, IV, Navy, Fort Eustis Nav. Hosp., Lee Hall, Va.
 *Lt. (j.g.) William R. Richardson, Navy, FPO, San Francisco
 *Lt. (j.g.) Paul A. Riemenschneider, Navy, FPO, San Francisco
 *Lt. (j.g.) James W. Robinson, Navy, U.S.N.H., St. Albans, N. Y.
 *Lt. Harold D. Rosenbaum, Army, Fitzsimons Gen. Hosp., Denver, Colo.
 *Lt. (j.g.) William A. Schaeffer, Navy, N.S.N.H., Corona, Calif.
 *Lt. Murray W. Scott, Jr., Army, U.S.A. Gen. Hosp., Camp Carson, Colo.
 *Lt. Myer Sharpe, Army, Reg. Hosp., Robins Field, Ga.
 *Lt. Louis Schwab, Army, Jefferson Barracks, St. Louis, Mo.
 *Lt. Louis A. Selverstone, Army, Ft. Logan, Colo.
 *Lt. (j.g.) Donald P. Todd, Navy, FPO, San Francisco
 *Lt. (j.g.) Donald B. Tower, Navy, FPO, San Francisco
 *Lt. (j.g.) Arthur W. Trott, Navy, FPO, San Francisco
 *Lt. James R. Wall, Army, Madigan Gen. Hosp., Ft. Lewis, Wash.
 *Lt. (j.g.) Edward P. Wallace, Navy, FPO, San Francisco
 *Lt. Frederick W. Wood, Jr., Army, Reg. Hosp., Ft. Belvoir, Va.
 *Lt. (j.g.) Harold C. Woodworth, Navy, FPO, San Francisco

Decorations and Citations

Major Edward G. Gullord, (1933), received the Bronze Star Medal with the following citation: "For meritorious service which contributed greatly to the comfort of the wounded who were evacuated through his base in Africa. Summer heat made the interiors of airplanes that landed for fuel with wounded aboard insufferable, but it was impracticable to remove the litter cases from the waiting plane. Consequently, the Major designed and perfected a mobile desert cooler which kept the men comfortable." He was also cited for his initiative and humanitarian effort in helping seriously wounded soldiers.

* * *

Commander Franklin G. Balch, Jr., (1923), was awarded the Bronze Star Medal with the following citation: "For distinguishing himself by meritorious achievement in connection with operations against the enemy. During the period between 6 November 1944 and 6 January 1945, as Senior Medical Officer of the U. S. S. Currituck during its stay in Leyte Gulf, Philippine Islands, Commander Balch displayed outstanding leadership, intelligence and professional skill. As a result of his efforts the health and morale of personnel of units in Aircraft, Seventh Fleet, based aboard the U.S.S. Currituck during this hazardous and critical period was maintained at a high standard. In addition Commander Balch furnished emergency surgical and medical service to several nearby units during the early weeks of the invasion of Leyte . . ."

* * *

Commander Walter S. Levenson, (1922), received the following citation: "By his sound administrative ability, exceptional professional skill and steadfast devotion to duty, he provided adequate medical care for personnel from ships and shore activities despite the lack of housing, sanitation, equipment and supplies. His outstanding service and performance of duty contributed materially to the welfare and morale of the naval forces in the Philippine Area, and his conduct throughout distinguished him among those performing duties of the same character."

* * *

Major Charles L. Short, (1928), received the Bronze Star Medal with the following citation: ". . . with resourcefulness and ability, Major Short devoted much of his time to the furtherance of research in the field of arthritis. Early in 1944 he began to publish the results of his findings and later submitted to the Theatre Surgeon, a comprehensive article on Arthritis.

This article, representing a masterly and complete summary of the disease as seen in the Theatre, was a most valuable as well as scholarly contribution to the field of medical literature . . ."

* * *

Major James A. Halsted, (1930), was awarded the Legion of Merit "for exceptionally meritorious conduct in the performance of outstanding services in the Mediterranean Theatre of Operations from 15 February 1943 to 12 April 1945. Major Halsted, by his continuous study of the problem of gastro-intestinal disorders in combat soldiers, evolved new methods of treatment which decreased the average hospitalization time from 25 days to 6, and enabled the Medical Corps to return 80 percent of such cases to full combat duty, whereas formerly only 40 percent could be returned."

* * *

Lt. Comdr. Stanley J. G. Nowak, (1926), received the following commendation: "Your performance of duty while serving at a large Naval Base Hospital in Southern England, prior to, during and after the invasion of the coast of France, in June 1944, has been brought to my attention. During the period of preparation of this hospital, you exhibited the utmost diligence in assisting in the organization of the surgical department. You were instrumental in working out methods of storing and issuing blood to all the clinical services. When casualties were being received in large numbers, your professional work in the operating theatres, often carried on for long periods without premission, merits the highest praise. Your industry, co-operation, and high quality of your professional services, and devotion to duty were exemplary and contributed very materially to the excellent care rendered at this hospital to thousands of battle casualties."

* * *

Colonel Adrian G. Gould, (1917), received the following commendation: ". . . During periods of heavy stress occasioned by overload of patients and physical facilities, your leadership and tireless devotion to duty were an inspiration to the members of your command . . ."

* * *

Major Ernest B. Oliver, (1938), received the Air Medal with the following citation: "For meritorious achievement in aerial flight. During the periods indicated he completed more than 150 hours of combat and operational flight as flight surgeon, going to the aid of ill and wounded personnel at forward bases and evacuating them to rear areas. On many of his flights he flew near the battle areas where fire from hostile aircraft was probable and expected . . ."

* * *

Captain John C. Trakas, (1943 March) was

awarded the Bronze Star Medal with the following citation: "For meritorious service in connection with military operations against the enemy from March 1, 1945 to April 14, 1945 in Germany. Throughout this period Captain Trakas performed his duties as medical officer in a most efficient and exemplary manner. Though forced to work under adverse conditions and repeatedly while exposed to hostile fire, Captain Trakas, through his high degree of professional skill and ceaseless devotion to duty, insured prompt and superior medical care to casualties. Through his medical skill, the lives of many wounded were saved . . ."

* * *

Captain David Dove, (1942), was awarded the Oak Leaf Cluster with the following citation: "For meritorious service in connection with military operations against an enemy of the United States in Germany, from 29 March to 8 May 1945. When, due to the rapid advance of attacking troops, it became impossible to establish an aid station in the usual manner, Captain Dove conceived the idea of an advance mobile aid station, set up in a vehicle and moving with attacking troops. He took personal charge of the station, continuously exposing himself to enemy fire in order to treat the wounded with a minimum of delay. A large number of lives were saved through the use of the mobile station. Captain Dove's leadership and devotion to duty exemplify the highest traditions of the military service."

(Dove also received the Silver Star, the Bronze Star and the Soldier's Medal.)

* * *

Lt. Col. James R. Lingley, (1928), was awarded the Bronze Star Medal with the following citation: "For meritorious achievement in connection with military operations in North Africa and Italy from 20 February 1943 to 8 May 1945. Not content with the operation of a highly efficient X-ray Department over a period of almost two years, Lt. Col. Lingley, as Chief of X-ray Service, 6th General Hospital, always sought for methods of improving existing facilities with whatever means he had at hand. He designed and had built a very simple but highly efficient laminograph, thereby permitting much more detailed roentgenographic study of deep body structures. While his hospital was stationed at Rome, Italy, where the operating schedule was extremely heavy, he re-adapted and redesigned an operating room fluoroscope. With this fluoroscope, the roentgenologist was able to guide the operating surgeon to a foreign body without interrupting the operation . . ."

* * *

Captain Stanley M. Wyman, (1939), was awarded the Bronze Star Medal with the following citation: "For meritorious services in support of combat operations from 15 January

to 29 April 1945, in Italy. Captain Wyman rendered outstanding services as a radiologist with a field hospital. Displaying great ingenuity and technical skill, he completely reorganized the x-ray department, expanded the functional and diagnostic facilities and designed innumerable ingenious devices and technical medical apparatus to promote the effective treatment of patients. The resourcefulness and thorough technical knowledge of Captain Wyman contributed immeasurably to the efficiency of the field hospital, reflecting great credit upon himself and the Medical Corps."

* * *

Lt. Col. Milton H. Clifford, (1931), was awarded the Bronze Star Medal with the following citation: "For meritorious service in support of military operations against the enemy from 20 April 1945 to 11 May 1945 as Commanding Officer of a Station Hospital on Morotai, Netherlands, East Indies. During this period, Lt. Col. Clifford was responsible for the treatment and early return to duty of all sick, injured and wounded personnel on Morotai and adjacent islands. Although faced with a critical shortage of trained medical personnel and an unusually heavy influx of patients, a condition aggravated by the departure of the only other hospital from the base, Lt. Col. Clifford, by the closest personal supervision, unselfish devotion to duty, and superior professional ability, was able to provide such efficient medical service that his installation returned an unusually high number of patients to duty in support of or in direct combat operations against the enemy . . ."

* * *

Captain Somers H. Sturgis, (1931), was awarded the Bronze Star Medal with the following citation: "For meritorious achievement in connection with military operations in North Africa and Italy from 24 March 1943 to 8 May 1945. Captain Sturgis, an accomplished plastic surgeon in the Surgical Service of the 6th General Hospital, contributed much to the furtherance of this all important war specialty in the Mediterranean Theater. In 1943, with another officer, he toured North Africa studying the treatment of maxillofacial wounds and injuries and as a result of his work on this tour was able to submit a comprehensive report upon this type of case. Subsequently, in a series of articles, he skillfully summarized his experiences with a large group of patients with maxillofacial wounds and injuries. In addition Captain Sturgis reported upon wounds and wound-healing and, in February 1945, read a paper before the Royal Army Medical Corps. His keen observation and painstaking care in reporting resulted in valuable contributions to vitally important phases of war-time surgery . . ."

* * *

Colonel Donald S. King, (1918), was awarded the Legion of Merit with the following cita-

tion: "For exceptionally meritorious conduct in the performance of outstanding services in North Africa and Italy from 20 February 1943 to 8 May 1945. By his outstanding ability, his tireless energy and his inspiration and wise counsel, Colonel King developed the Medical Service of the 6th General Hospital to an extremely high degree of efficiency. Not content with superior performance of his regular duties, he devoted many hours to the conduct of research and the guidance of other officers in his department in the preparation of articles which presented important information gathered from studies of patients in the hospital. Because of his high professional qualifications, Colonel King was chosen as the physician to attend the Right Honorable Winston S. Churchill when the British Prime Minister was taken ill upon his return from the Teheran Conference. In the summer of 1944, as the senior officer of a committee to study tuberculosis in the Mediterranean Theater, he completed an exhaustive study of the disease as found in that Theater. Colonel King's superior performance of duty and broad contributions to the furtherance of medical knowledge reflect great credit upon himself and the Army Medical Service . . ."

* * *

Major Richard B. Capps, (1931), was awarded the Bronze Star Medal with the following citation: "For meritorious achievement in connection with military operations in the Mediterranean Theater of Operations from 21 January 1944 to 8 July 1944. By his great technical skill, diagnostic ability and painstaking persistence, Major Capps contributed in a large measure to the discovery and standardization of methods and diagnosing and treating infectious hepatitis, a disease which was common to the Allied Forces throughout the Theater, but about which very little was known prior to the work of Major Capps and his associates . . . The investigations in which Major Capps played such an outstanding role constitute one of this war's major contributions to the medical science, and are in keeping with the highest traditions of research in the Medical Corps of the Army of the United States."

* * *

Captain Richard V. Riddell, (1942), was awarded the Bronze Star Medal with the following citation: "For meritorious service in connection with military operations . . . from 17 July 1944 to 8 May 1945 in France, Luxembourg, Belgium and Germany. Through his professional skill and sympathetic understanding, he has maintained a superior standard of health in his battalion. He has demonstrated initiative and diligence in furthering the general welfare of those with whom he served, and without thought to his own interests. His devotion to high medical standards has spurred those working under him to emulate his zeal,

and is in keeping with the best traditions of the armed services . . ."

* * *

Lt. Col. Charles P. Sheldon, (1929), was awarded the Bronze Star Medal with the following citation: "For meritorious achievement in Leyte, Philippine Islands, from 29 January 1945 to 6 March 1945, in connection with military operations against the enemy. As Chief of the Hospitalization Section, Office of the Chief Surgeon, United States Army Services of Supply, Lt. Col. Sheldon was responsible for the supervision and planning of the hospitalization program of a major base. His advance calculations anticipated the requirements of developing operations with such accuracy that adequate base hospital facilities were provided to hospitalize all casualties from local operations and to provide care for high percentage of all patients evacuated during the Philippine Islands campaigns. By his sound professional knowledge and devotion to duty, Lt. Col. Sheldon was instrumental in providing important services for the victorious armies in the Southwest Pacific . . ."

* * *

Captain Robert J. McKay, Jr., (1943 March), was awarded the Bronze Star Medal with the following citation: "For meritorious service in connection with military operations against the enemy from 24 December 1944 to 3 April 1945, in Belgium, France, Holland, Germany. McKay has performed his duties as Battalion Surgeon in a very superior manner, working tirelessly and often under very hazardous conditions. His dressing station was always located close to the lines when the battalion was in action. He worked in cool efficient manner under fire oftentimes directly responsible for the saving of life. His untiring devotion to duty and ability have contributed towards the morale of his unit and his fine personal example has brought about prompt aid and evacuation of wounded from his and other units."

* * *

Captain William W. Tribby, (1937), was awarded the Bronze Star Medal with the following citation: "For meritorious services in support of combat operations from 18 February to 18 December 1944, in Italy. Captain Tribby served as Director of a mobile section of a medical laboratory on the Anzio Beachhead. Under frequent enemy shellfire and bombing, he constantly devoted his utmost efforts in the establishment of an efficient medical laboratory service to the forward hospitals supporting combat troops. Captain Tribby skillfully performed thorough autopsies to facilitate improved methods of battlefield medical aid. His painstaking investigation of an outbreak of typhoid fever in an infantry regiment quickly brought the epidemic under control and prevented contagion to surrounding troops . . ."

ASSOCIATION OFFICERS

WALTER N. PALMER, *President*
REGINALD FITZ, *Vice-President*
CLARK W. HEATH, *Secretary*
FRANC D. INGRAHAM, *Treasurer*

COUNCILLORS

J. C. Aub	J. H. Means
J. D. Barney	J. P. O'Hare
L. Dexter	T. M. Spies
F. M. Ingersoll	N. B. Talbot

EDITOR

Clark W. Heath

ASSISTANT EDITOR

Francis D. Moore

EDITORIAL BOARD

Joseph Garland

Robert N. Nye Wyman Richardson
Mrs. K. B. Wilson, *Executive Secretary*
Harvard Medical School
Boston, Mass.

a married couple in this community are \$150 a month. Most veterans will be able to make up the difference of \$60 a month by money saved during the war. There are, however, many exceptions and emergencies. For example, the allowances are not increased for dependents other than a wife, so that if a couple have children they will receive only the same amount as the couple without children. Many of our younger alumni are still struggling under debts incurred during medical and pre-medical training. There is no question that emergencies will arise during the reconstruction period for which all available aids will be needed.

A serious problem is that concerned with the return of young men whose abilities lie particularly in the fields of research and teaching. There has been a break in continuity of teaching staffs brought about by the war. Younger men left the laboratory and hospital and their duties were taken care of as well as possible by those who remained. Ordinarily there would have been a group of young men at all times who could fill the natural gaps in the teaching and research ranks. These men are returning to the School older and with more responsibilities than they would have had at a corresponding stage in their careers if they had not been interrupted by the war. The government will probably aid these men also, even though they are on salary (providing they are working in recognized hospitals and laboratories). Here again the stipends may be so inadequate as to discourage, and the able person may be lost in a field of work where he is much needed. The Medical School requires additional funds for fellowships for these men.

The Association wishes to do all it can for these men and for the continuity of the School. For our own personal part we have never known the School to be in a financial position in which it could take care of more than a small portion of its real needs.

Editorial

For some time the Council of the Association has been interested in providing material aids to returning veterans who wish to complete their medical training. An appeal for contributions has been sent to all alumni. Although the response of many alumni has been generous, a few have merely reminded us that the G.I. Bill of Rights will take care of the expenses of these men. To an extent this is true. However, there are many circumstances in which additional financial help will make the difference between a veteran getting the educational advantages he needs, and merely going into practice with what training he already possesses.

Under present laws the allowances are \$65 a month for a single man, \$90 a month for a married man, in addition to tuition and special expenses. The Veterans' Advisory Bureau of the University has estimated that minimal living expenses for

Book Reviews

VIRUS AS ORGANISM: Evolutionary and Ecological Aspects of Some Human Virus Diseases, by Frank MacFarlane Burnet, M.D., F.R.S., Director, Walter and Eliza Hall Institute of Research in Pathology and Medicine, Melbourne, Australia. Harvard University Press, Cambridge, Massachusetts, 1945. Price \$2.00.

The *Edward K. Dunham Lectures for the Promotion of the Medical Sciences* were delivered in 1944 at the Harvard Medical School by Dr. F. M. Burnet. Those who were privileged to hear these lectures were fascinated by the speaker's theory concerning the evolution of viruses and virus diseases and by his interpretation of many of the known facts and of his personal observations concerning virus diseases in relation to the biologic significance of the human diseases for the survival of the various species of virus concerned. These lectures in a somewhat expanded form are now available in the newest volume of the Harvard University Monographs in Medicine and Public Health. Those who did not have the privilege of hearing Dr. Burnet will certainly have a treat in store for them in this little volume and those who did, will be glad to have the opportunity to reread these lectures in their present form.

Throughout this book, Dr. Burnet has tried to fit together the known facts concerning the historical evolution of the human virus diseases, their origin in animal reservoirs, their modes of reproduction and survival and the appearance of mutants and of forms with varying virulence and pathogenicity. His basic interpretation of virus diseases is that the viruses are micro-organisms which have evolved by parasitic degeneration from larger micro-organisms, many of them probably from bacteria. The viruses reproduce at the expense of suitable substances preformed within the living structure of the susceptible cell. Burnet considers it most likely that variants among viruses arise by a process analogous to gene mutation in higher forms and become demonstrable only when the environment is such as to favor the survival of the variant over the original form.

Like all living species the viruses must have found a way of indefinite survival. The mode by which the species survive may have little immediate relation to the obvious clinical manifestations of the virus's activity. Burnet postulates that in the past all or nearly all of the known virus diseases of man must have been

derived from animal infection. The transfer of virus infection from one host to another is of paramount importance and examples are cited to show that the transfer from animal reservoirs to man are taking place at present. The selective survival of suitable mutants in the new host may result in a new mode of indefinite survival of virus species. Chance plays a dominant role in determining the pattern of virus diseases.

In this interpretation, human virus diseases, particularly the severe and epidemic varieties are only accidents in the course of the evolution of the viruses and their adaptation to their environment. Conditions which tend to eliminate the host (that is, extreme virulence of the virus with a high fatality rate among the infected individuals) or which otherwise diminish the opportunities for transfer of the viruses continuously through a large number of hosts would be less advantageous for the survival of the viruses. On the contrary, the more stable host-parasite relationships which permit multiplication of the viruses within their host and dissemination within the host species with a minimum of disturbance to the latter are best suitable for the perpetuation of the viruses. The latter conditions are also the least likely to produce manifestations of disease except by the accidental co-existence of unusual circumstances or by the appearance of more virulent mutants.

The theory advanced by the author is highly interesting in itself. In addition, it offers considerable food for thought and suggests new and broader methods of investigative approach to the problem of virus diseases. In the course of developing this theory, the author reviews many important aspects of the known virus diseases of man. In particular, the work done by the author and his associates is reviewed and fitted into the general picture.

The book is well written and the high standard of the Harvard University Press has been maintained in the printing in spite of the fact that it was published at a time when paper and labor shortages were still acute. It should prove of the greatest interest and highly instructive both to physicians concerned with the treatment or study of infectious diseases and to laboratory workers in many fields of biologic research.

MAXWELL FINLAND, '26.

WHAT PEOPLE ARE: A STUDY OF NORMAL YOUNG MEN, by Clark W. Heath, Lucien Brouha, Lewise W. Gregory, Carl C. Seltzer, Frederic L. Wells and William L. Woods. Harvard University Press, Cambridge, Mass., 1945. 141 pages, \$2.00.

This book is an interim report on an experi-

ment which certainly should be conducted and equally certainly will be exposed to severe criticism and to uncritical admiration. The promising thing is that the experiment is strikingly conspicuous and is patently honest and intelligent. The idea behind the project is that a staff can be assembled who can discover facts about well organized young men, who are doing well in the admittedly limited environment of Harvard College. It goes without saying that any investigators worth their salt will soon be concerning themselves with the basis for selection of students and that they will inevitably come to a critical study of the environment provided by the President and Fellows. The project starts, therefore, with a considerable amount of fact-finding and will almost certainly proceed rapidly towards interpretation in terms of selection and management.

The first phase of this review of college education is the collection of a mass of data and its classification. It was essential, of course, to devise fairly early in the study a list of items. Some of them were easy to define. For instance, Dr. Seltzer has anthropomorphic measurements which are readily classified and are presumably durable. No one would question the reliability or the relevance of standard physiological data and it is reasonable to assume that certain items concerning the socio-economic status of parents fit into a statistical framework. Moreover, medical and psychological data have been put into tables and graphs for years with reasonable success.

Dr. Bock, the Director of the Study, knows a great deal about the students as a whole, since he is in charge of health in the college. He very frankly chose the people for the Grant Study from among the doctors and the psychologists and anthropologists and physiologists who were willing to shift their interest from sick people to those without evident disabilities. Obviously, there is good reason for this choice but equally surely the procedure excluded a good many people who might have been interested.

The caliber of the staff is unquestionably high. The excitement and controversy starts, however, when categories derived from the impressions of individual examiners are treated statistically and made the basis of correlations with physical data. The reporters are, of course, willing to admit that personal judgment enters in but they are prepared to defend their classifications.

The result is extremely interesting and very important. For instance, it is proposed that it is legitimate to correlate the body type with the personality traits and so on.

The study will be entirely futile if the examiners change methods and classifications too readily. It will be useful, as far as this reviewer can see, only if the present plan is vigorously and perhaps obstinately kept from important change.

Fortunately, the courage and the tenacity of the staff are evident. There is cheerful prospect of well organized collisions with many of the tentative formulations of committees on curriculum and the committees who select students. One minor source of controversy seems unnecessary. The anthropological discussions center around physical types which are described in terms of masculine and feminine components. A good deal of rather futile argument might be avoided by devising or retaining a verbal fig leaf or two.

In essentials, however, this interim report is completely valid if it is taken as a discussion of the points of view of a group of people who are concerned with the appraisal of the young men who arrive in college and are subject to the various stresses and protections involved.

This volume and a preceding one by Dr. Hooton set up a shining and, I hope, durable mark for the reactionary and progressive to shoot at. So far, the attackers have very little ammunition in usable form and it seems likely that the Grant Study will progress cheerily and effectively.

BRONSON CROTHERS, '10.



